

157752

Wednesday, April 05, 2017 2:11:25 PM

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 4/6/2017 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 4/13/2017 **Req'd Qty:** 1.00 ***1***

Customer:

Reference: SCHEDULED/S

Approvals: _____ **Process Plan:** _____ **Date:** APR 05 2017

Tooling: _____ **Date:** _____

Run Start *NR1*

QC: 3-89 Date: SPC (Y/N): Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

646.4000

C1

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP 646.4001

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.03

Quality Control

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
2025 2024 2023 2022 2021 2020 2019 2018 2017 2016 2015 2014 2013 2012 2011 2010 2009 2008 2007 2006 2005 2004 2003 2002 2001 2000 1999 1998 1997 1996 1995 1994 1993 1992 1991 1990 1989 1988 1987 1986 1985 1984 1983 1982 1981 1980 1979 1978 1977 1976 1975 1974 1973 1972 1971 1970 1969 1968 1967 1966 1965 1964 1963 1962 1961 1960 1959 1958 1957 1956 1955 1954 1953 1952 1951 1950 1949 1948 1947 1946 1945 1944 1943 1942 1941 1940 1939 1938 1937 1936 1935 1934 1933 1932 1931 1930 1929 1928 1927 1926 1925 1924 1923 1922 1921 1920 1919 1918 1917 1916 1915 1914 1913 1912 1911 1910 1909 1908 1907 1906 1905 1904 1903 1902 1901 1900 1899 1898 1897 1896 1895 1894 1893 1892 1891 1890 1889 1888 1887 1886 1885 1884 1883 1882 1881 1880 1879 1878 1877 1876 1875 1874 1873 1872 1871 1870 1869 1868 1867 1866 1865 1864 1863 1862 1861 1860 1859 1858 1857 1856 1855 1854 1853 1852 1851 1850 1849 1848 1847 1846 1845 1844 1843 1842 1841 1840 1839 1838 1837 1836 1835 1834 1833 1832 1831 1830 1829 1828 1827 1826 1825 1824 1823 1822 1821 1820 1819 1818 1817 1816 1815 1814 1813 1812 1811 1810 1809 1808 1807 1806 1805 1804 1803 1802 1801 1800 1799 1798 1797 1796 1795 1794 1793 1792 1791 1790 1789 1788 1787 1786 1785 1784 1783 1782 1781 1780 1779 1778 1777 1776 1775 1774 1773 1772 1771 1770 1769 1768 1767 1766 1765 1764 1763 1762 1761 1760 1759 1758 1757 1756 1755 1754 1753 1752 1751 1750 1749 1748 1747 1746 1745 1744 1743 1742 1741 1740 1739 1738 1737 1736 1735 1734 1733 1732 1731 1730 1729 1728 1727 1726 1725 1724 1723 1722 1721 1720 1719 1718 1717 1716 1715 1714 1713 1712 1711 1710 1709 1708 1707 1706 1705 1704 1703 1702 1701 1700 1699 1698 1697 1696 1695 1694 1693 1692 1691 1690 1689 1688 1687 1686 1685 1684 1683 1682 1681 1680 1679 1678 1677 1676 1675 1674 1673 1672 1671 1670 1669 1668 1667 1666 1665 1664 1663 1662 1661 1660 1659 1658 1657 1656 1655 1654 1653 1652 1651 1650 1649 1648 1647 1646 1645 1644 1643 1642 1641 1640 1639 1638 1637 1636 1635 1634 1633 1632 1631 1630 1629 1628 1627 1626 1625 1624 1623 1622 1621 1620 1619 1618 1617 1616 1615 1614 1613 1612 1611 1610 1609 1608 1607 1606 1605 1604 1603 1602 1601 1600 1599 1598 1597 1596 1595 1594 1593 1592 1591 1590 1589 1588 1587 1586 1585 1584 1583 1582 1581 1580 1579 1578 1577 1576 1575 1574 1573 1572 1571 1570 1569 1568 1567 1566 1565 1564 1563 1562 1561 1560 1559 1558 1557 1556 1555 1554 1553 1552 1551 1550 1549 1548 1547 1546 1545 1544 1543 1542 1541 1540 1539 1538 1537 1536 1535 1534 1533 1532 1531 1530 1529 1528 1527 1526 1525 1524 1523 1522 1521 1520 1519 1518 1517 1516 1515 1514 1513 1512 1511 1510 1509 1508 1507 1506 1505 1504 1503 1502 1501 1500 1499 1498 1497 1496 1495 1494 1493 1492 1491 1490 1489 1488 1487 1486 1485 1484 1483 1482 1481 1480 1479 1478 1477 1476 1475 1474 1473 1472 1471 1470 1469 1468 1467 1466 1465 1464 1463 1462 1461 1460 1459 1458 1457 1456 1455 1454 1453 1452 1451 1450 1449 1448 1447 1446 1445 1444 1443 1442 1441 1440 1439 1438 1437 1436 1435 1434 1433 1432 1431 1430 1429 1428 1427 1426 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1225 1224 1223 1222 1221 1220 1219 1218 1217 1216 1215 1214 1213 1212 1211 1210 1209 1208 1207 1206 1205 1204 1203 1202 1201 1200 1199 1198 1197 1196 1195 1194 1193 1192 1191 1190 1189 1188 1187 1186 1185 1184 1183 1182 1181 1180 1179 1178 1177 1176 1175 1174 1173 1172 1171 1170 1169 1168 1167 1166 1165 1164 1163 1162 1161 1160 1159 1158 1157 1156 1155 1154 1153 1152 1151 1150 1149 1148 1147 1146 1145 1144 1143 1142 1141 1140 1139 1138 1137 1136 1135 1134 1133 1132 1131 1130 1129 1128 1127 1126 1125 1124 1123 1122 1121 1120 1119 1118 1117 1116 1115 1114 1113 1112 1111 1110 1109 1108 1107 1106 1105 1104 1103 1102 1101 1100 1099 1098 1097 1096 1095 1094 1093 1092 1091 1090 1089 1088 1087 1086 1085 1084 1083 1082 1081 1080 1079 1078 1077 1076 1075 1074 1073 1072 1071 1070 1069 1068 1067 1066 1065 1064 1063 1062 1061 1060 1059 1058 1057 1056 1055 1054 1053 1052 1051 1050 1049 1048 1047 1046 1045 1044 1043 1042 1041 1040 1039 1038 1037 1036 1035 1034 1033 1032 1031 1030 1029 1028 1027 1026 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782 781 780 779 778 777 776 775 774 773 772 771 770 769 768 767 766 765 764 763 762 761 760 759 758 757 756 755 754 753 752 751 750 749 748 747 746 745 744 743 742 741 740 739 738 737 736 735 734 733 732 731 730 729 728 727 726 725 724 723 722 721 720 719 718 717 716 715 714 713 712 711 710 709 708 707 706 705 704 703 702 701 700 699 698 697 696 695 694 693 692 691 690 689 688 687 686 685 684 683 682 681 680 679 678 677 676 675 674 673 672 671 670 669 668 667 666 665 664 663 662 661 660 659 658 657 656 655 654 653 652 651 650 649 648 647 646 645 644 643 642 641 640 639 638 637 636 635 634 633 632 631 630 629 628 627 626 625 624 623 622 621 620 619 618 617 616 615 614 613 612 611 610 609 608 607 606 605 604 603 602 601 600 599 598 597 596 595 594 593 592 591 590 589 588 587 586 585 584 583 582 581 580 579 578 577 576 575 574 573 572 571 570 569 568 567 566 565 564 563 562 561 560 559 558 557 556 555 554 553 552 551 550 549 548 547 546 545 544 543 542 541 540 539 538 537 536 535 534 533 532 531 530 529 528 527 526 525 524 523 522 521 520 519 518 517 516 515 514 513 512 511 510 509 508 507 506 505 504 503 502 501 500 499 498 497 496 495 494 493 492 491 490 489 488 487 486 485 484 483 482 481 480 479 478 477 476 475 474 473 472 471 470 469 468 467 466 465 464 463 462 461 460 459 458 457 456 455 454 453 452 451 450 449 448 447 446 445 444 443 442 441 440 439 438 437 436 435 434 433 432 431 430 429 428 427 426 425 424 423 422 421 420 419 418 417 416 415 414 413 412 411 410 409 408 407 406 405 404 403 402 401 400 399 398 397 396 395 394 393 392 391 390 389 388 387 386 385 384 383 382 381 380 379 378 377 376 375 374 373 372 371 370 369 368 367 366 365 364 363 362 361 360 359 358 357 356 355 354 353 352 351 350 349 348 347 346 345 344 343 342 341 340 339 338 337 336 335 334 333 332 331 330 329 328 327 326 325 324 323 322 321 320 319 318 317 316 315 314 313 312 311 310 309 308 307 306 305 304 303 302 301 300 299 298 297 296 295 294 293 292 291 290 289 288 287 286 285 284 283 282 281 280 279 278 277 276 275 274 273 272 271 270 269 268 267 266 265 264 263 262 261 260 259 258 257 256 255 254 253 252 251 250 249 248 247 246 245 244 243 242 241 240 239 238 237 236 235 234 233 232 231 230 229 228 227 226 225 224 223 222 221 220 219 218 217 216 215 214 213 212 211 210 209 208 207 206 205 204 203 202 201 200 199 198 197 196 195 194 193 192 191 190 189 188 187 186 185 184 183 182 181 180 179 178 177 176 175 174 173 172 171 170 169 168 167 166 165 164 163 162 161 160 159 158 157 156 155 154 153 152 151 150 149 148 147 146 145 144 143 142 141 140 139 138 137 136 135 134 133 132 131 130 129 128 127 126 125 124 123 122 121 120 119 118 117 116 115 114 113 112 111 110 109 108 107 106 105 104 103 102 101 100 99 98 97 96 95 94 93 92 91 90 89 88 87 86 85 84 83 82 81 80 79 78 77 76 75 74 73 72 71 70 69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9 -10 -11 -12 -13 -14 -15 -16 -17 -18 -19 -20 -21 -22 -23 -24 -25 -26 -27 -28 -29 -30 -31 -32 -33 -34 -35 -36 -37 -38 -39 -40 -41 -42 -43 -44 -45 -46 -47 -48 -49 -50 -51 -52 -53 -54 -55 -56 -57 -58 -59 -60 -61 -62 -63 -64 -65 -66 -67 -68 -69 -70 -71 -72 -73 -74 -75 -76 -77 -78 -79 -80 -81 -82 -83 -84 -85 -86 -87 -88 -89 -90 -91 -92 -9					

Work Order ID 157752

Wednesday, April 05, 2017 2:11:25 PM

157752

Page 2

Item ID: 646.4001 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: AS350 Cable Cutter System
Start Date: 4/6/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 4/13/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference: SCHEDULED/S

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00							
130									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP 646.4001								
	Location: <u>P9101</u>								
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.10							
Quality Control									

DAS 28 9-89 APR 12 2017

17/4/13

DAS 21 9-89 APR 13 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					

Wednesday, April 05, 2017 2:11:23 PM

Page 1

157752

646 4001

Required Date: 4/13/2017

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

APR 11 2017

DAS
6
9-88

DAS
27
9-89

**DAS
28
9-89**

Loc Code

CCK096

112

m135867

112

1

★★

DAS
27
9-89

Loc Code

PKG

30

M136586

5

M136862

12

M137073

12

M134249

1

1/1/2017

1

**DAS
27
9-89**

Loc Code

PKG

30

m136586

6

m136862

12

m137073

12

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

Picklist Print

Wednesday, April 05, 2017 2:11:23 PM

Work Order ID: 157752

157752

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 4/6/2017

Required Date: 4/13/2017

Start Qty: 1.00

Required Qty: 1.00

600.1012 Purchased No

100 Each 15.0000 1 1

600 1012

Sealant PR1425B2 (#654 sem)

**

APR 11 2017

DAS 6 9-89

DAS 27 9-89

Location

Loc Qty

Loc Code

cck017

15

m136838

8

m1370073

7

600.1013 Purchased No

100 Each 60.0000 5 5

600 1013

021200-3M TAPE PRIMER 94 PRIMER 24216

**

APR 11 2017

DAS 6 9-89

DAS 27 9-89

Location

Loc Qty

Loc Code

CCK096

60

m136345

35

m137150

25

646.2910 Manufactured No

100 Each 14.0000 1 1

646 2910

Deflector

**

APR 11 2017

DAS 6 9-89

DAS 27 9-89

Location

Loc Qty

Loc Code

CCK050

14

155356

14

646.3001 Manufactured No

100 Each 6.0000 1 1

646 3001

Lower Cable Cutter Assembly

**

APR 11 2017

DAS 27 9-89

Location

Loc Qty

Loc Code

cck018

6

156876

4

156316

2

10/7/2018

10/8/2018

DAS 28 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, April 05, 2017 2:11:23 PM

Page 3

Work Order ID: 157752

157752

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 4/6/2017

Required Date: 4/13/2017

Start Qty: 1.00

Required Qty: 1.00

646.3110
646 3110
Channel

Manufactured No

100 Each

8.0000

1 1

**

APR 11 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

cck020

8

2

6

152235

156797

646.3210
646 3210
Support

Manufactured No

100 Each

10.0000

1 1

**

APR 11 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

cck020

10

10

155378

646.3301
646 3301
Upper Cutter Assembly

Manufactured No

100 Each

5.0000

1 1

**

APR 11 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

cck018

5

5

156800

646.3510
646 3510
Strut

Manufactured No

100 Each

13.0000

1 1

**

APR 11 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

cck104

3

3

10

10

152366

CCK108A

156767

Wednesday, April 05, 2017 2:11:24 PM

Shop Packet Print

Page 3

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								

Picklist Print

Wednesday, April 05, 2017 2:11:24 PM

Page 4

Work Order ID: 157752

157752

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 4/6/2017

Required Date: 4/13/2017

Start Qty: 1.00

Required Qty: 1.00

646.3511 Manufactured No

100 Each

7.0000

1 1

646 3511

Strut

**

APR 11 2017 9-89 DAS 27 9-89

Location

Loc Qty

Loc Code

cck104

1

155269

1

CCK108A

6

156231

6

646.3610 Manufactured No

100 Each

19.0000

1 1

646 3610

Filler

**

APR 11 2017 9-89 DAS 27 9-89

Location

Loc Qty

Loc Code

cck104

19

151687

1

156880

18

646.3710 Manufactured No

100 Each

23.0000

1 1

646 3710

Doubler

**

APR 11 2017 9-89 DAS 27 9-89

Location

Loc Qty

Loc Code

CCK006

23

152594

23

646.3711 Manufactured No

100 Each

12.0000

1 1

646 3711

Clip

**

APR 11 2017 9-89 DAS 27 9-89

Location

Loc Qty

Loc Code

cck104

12

151670

2

156840

10

Wednesday, April 05, 2017 2:11:24 PM

Shop Packet Print

Page 4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

Picklist Print

Wednesday, April 05, 2017 2:11:24 PM

Page 5

Work Order ID: 157752

157752

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 4/6/2017

Required Date: 4/13/2017

Start Qty: 1.00

Required Qty: 1.00

646.3712 Manufactured No

100 Each

14.0000

1 1

646 3712

Clip

**

APR 11 2017
DAS 6
9-89

DAS 27
9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

cck104

14

155309

4

156884

10

646.3713 Manufactured No

100 Each

14.0000

1 1

646 3713

Gusset

**

APR 11 2017
DAS 6
9-89

DAS 27
9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

cck105

14

151646

4

156776

10

646.3714 Manufactured No

100 Each

14.0000

1 1

646 3714

Gusset

**

APR 11 2017
DAS 6
9-89

DAS 27
9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

cck105

14

151643

4

156761

10

646.3715 Manufactured No

100 Each

8.0000

2 2

646 3715

Strut Doubler

**

APR 11 2017
DAS 6
9-89

DAS 27
9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

cck105

8

156833

8

Wednesday, April 05, 2017 2:11:24 PM

Shop Packet Print

Page 5

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____			

Picklist Print

Wednesday, April 05, 2017 2:11:24 PM

Page 6

Work Order ID: 157752

157752

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 4/6/2017

Required Date: 4/13/2017

Start Qty: 1.00

Required Qty: 1.00

646.3716 Manufactured No

100 Each

13.0000

1

1

ADD 1 1 2017

646 3716

Gauge Bracket

**

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck105

13

140845

3

156773

10

646.3717 Manufactured No

100 Each

9.0000

1

1

ADD 1 1 2017

646 3717

Doubler

**

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck105

9

151423

1

155481

8

646.3718 Manufactured No

100 Each

15.0000

2

2

ADD 1 1 2017

646 3718

Custom Washer

**

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck105

15

155395

15

646.3719 Manufactured No

100 Each

18.0000

2

2

ADD 9-89 2017

646 3719

Doubler

**

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck105

18

155554

8

156810

10

Wednesday, April 05, 2017 2:11:24 PM

Shop Packet Print

Page 6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By 					
				Lead hand / Supervisor Approval Verification 					
				QC / QA Coordinator Approval 					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : _____							

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step # : _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, April 05, 2017 2:11:24 PM

Work Order ID: 157752

157752

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 4/6/2017

Required Date: 4/13/2017

Start Qty: 1.00

Required Qty: 1.00

646.3910
646 3910
Shim

Manufactured No

100 Each

29.0000

4 4

**

DAS
6
9-89

APR 11 2017

DAS
27
9-89

Location Loc Qty Loc Code

CCK106

17

151458

1

155260

4

156217

12

CCK108A

12

156793

12

646.3911
646 3911
Shim

Manufactured No

100 Each

13.0000

1 1

**

DAS
6
9-89

APR 11 2017

DAS
27
9-89

Location Loc Qty Loc Code

CCK106

13

126229

13

646.3912
646 3912
Shim

Manufactured No

100 Each

27.0000

4 4

**

DAS
6
9-89

APR 11 2017

DAS
27
9-89

Location Loc Qty Loc Code

CCK108A

27

155639

12

156874

15

646.3913
646 3913
Shim

Manufactured No

100 Each

52.0000

1 1

**

DAS
6
9-89

APR 11 2017

DAS
27
9-89

Location Loc Qty Loc Code

CCK106

52

126060

52

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, April 05, 2017 2:11:24 PM

Page 9

Work Order ID: 157752

157752

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 4/6/2017

Required Date: 4/13/2017

Start Qty: 1.00

Required Qty: 1.00

646.9410 Manufactured No

100 Each

61.0000

1 1

646 9410

Shim

DAS
28
9-89

**

DAS
6
9-89

APR 11 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

cck011

61

140671

61

647.0112

Manufactured No

100 Each

49.0000

2 2

647 0112

Strut Bracket

DAS
28
9-89

**

DAS
6
9-89

APR 11 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK106

17

156756

17

CCK106

32

155480

32

647.7703

Manufactured No

100 Each

8.0000

2 2

647 7703

Strut Assembly

DAS
28
9-89

**

DAS
6
9-89

APR 11 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK114

8

157782

8

650.9201

Manufactured No

100 Each

30.0000

2 2

650 9201

Eyelet Bracket Assembly

DAS
28
9-89

**

DAS
6
9-89

APR 11 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

cck127

30

155578

10

156828

20

Wednesday, April 05, 2017 2:11:24 PM

Shop Packet Print

Page 9

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step # : _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____			

Picklist Print

Wednesday, April 05, 2017 2:11:24 PM

Work Order ID: 157752

157752

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 4/6/2017

Required Date: 4/13/2017

Start Qty: 1.00

Required Qty: 1.00

AN3-11A
AN3-11A
Bolt

Purchased No

100 Each

398.0000

10 10

**

DAS
6
9-89

APR 11 2017

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

over003

250

153855

150

m136192

100

ST349

148

153855

148

AN3-12A
AN3-12A
Bolt

Purchased No

100 Each

269.0000

2 2

**

DAS
6
9-89

APR 11 2017

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

over003

206

153854

206

ST349

63

m135603

63

AN3-13A
AN3-13A
Bolt

Purchased No

100 Each

47.0000

1 1

**

DAS
6
9-89

APR 11 2017

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

16

m127070

16

ST349

31

153845

30

m136406

1

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step # : _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step # : _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, April 05, 2017 2:11:24 PM

Page 12

Work Order ID: 157752

157752

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 4/6/2017

Required Date: 4/13/2017

Start Qty: 1.00

Required Qty: 1.00

AN3-6A Purchased No

100 Each 73.0000 2 2

AN3-6A

Bolt

DAS
28
9-89

**

DAS
6
9-89
APR 11 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

ST350

73

153844

73

AN44-5A Purchased No

100 Each 29.0000 2 2

AN44-5A

Eyebolt

DAS
28
9-89

**

DAS
6
9-89
APR 11 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

ST339

29

m136047

5

m136866

12

m137075

12

AN4C7A Purchased No

100 Each 66.0000 2 2

AN4C7A

BOLT

DAS
28
9-89

**

DAS
6
9-89
APR 11 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

OVER002

54

m136295

54

ST345

12

123900

4

m135864

8

AN665-34R Purchased No

100 Each 20.0000 2 2

AN665-34R

Clevis

DAS
28
9-89

**

DAS
6
9-89
APR 11 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

ST330

20

153852

20

Wednesday, April 05, 2017 2:11:24 PM

Shop Packet Print

Page 12

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By 		
							Lead hand / Supervisor Approval Verification 		
							QC / QA Coordinator Approval 		

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

Picklist Print

Wednesday, April 05, 2017 2:11:24 PM

Page 13

Work Order ID: 157752

157752

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 4/6/2017

Required Date: 4/13/2017

Start Qty: 1.00

Required Qty: 1.00

CCR264SS3-02

Purchased

No

100

Each

293.0000

36

36

CCR264SS3-02

Cherry Rivet

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK003

225

M136986

225

ST321

68

M136648

68

100

Each

102.0000

14

14

CR3213-5-3

Purchased

No

CR3213-5-3

Cherry Rivet

DAS
28
9-89

Location

Loc Qty

Loc Code

ST319

102

m136537

2

m136851

100

100

Each

1,422.000

2

2

MS20426AD5-7

Purchased

No

MS20426AD5-7

RIVET

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK004

703

153848

703

ST311

719

M133922

719

100

Each

702.0000

8

8

MS20470AD5-5.5

Purchased

No

MS20470AD5-5 5

Rivet

DAS
28
9-89

Location

Loc Qty

Loc Code

ST309

702

m134063

702

Wednesday, April 05, 2017 2:11:24 PM

Shop Packet Print

Page 13

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____			

Picklist Print

Wednesday, April 05, 2017 2:11:24 PM

Work Order ID: 157752

157752

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 4/6/2017

Required Date: 4/13/2017

Start Qty: 1.00

Required Qty: 1.00

MS20470AD5-6
MS20470AD5-6
 RIVET

DAS
 28
 9-89

Location

Loc Qty

Loc Code

ST309

592

124089

592

100 Each

592.0000

8

8

**

DAS
 6
 9-89

APR 11 2017

DAS
 27
 9-89

MS20470AD5-7
MS20470AD5-7
 Rivet

DAS
 28
 9-89

Location

Loc Qty

Loc Code

ST309

368

123425

368

100 Each

368.0000

3

3

**

DAS
 6
 9-89

APR 11 2017

DAS
 27
 9-89

MS21042-08
MS21042-08
 USE MS21042L08

DAS
 28
 9-89

Location

Loc Qty

Loc Code

ST309

368

123425

368

100 Each

0.0000

2

2

**

DAS
 6
 9-89

APR 11 2017

137061

DAS
 27
 9-89

MS21042-3
MS21042-3
 Nut

DAS
 28
 9-89

Location

Loc Qty

Loc Code

ST309

368

123425

368

100 Each

0.0000

2

2

**

DAS
 6
 9-89

APR 11 2017

137073

DAS
 27
 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					

Picklist Print

Wednesday, April 05, 2017 2:11:24 PM

Work Order ID: 157752

157752

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 4/6/2017

Required Date: 4/13/2017

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

100

Each

1,921.000

61

61

MS21042L3

Nut

**

APR 11 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

FP001

100

m135945

100

GA

208

m134360

102

M136665

106

OVER007

800

m134360

0

M136665

300

m137166

500

ST303

813

m137073

813

MS21042L4

Purchased

No

100

Each

1,365.000

2

2

MS21042L4

Nut

**

APR 11 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

FP001

10

m133363

10

GA

154

m135058

154

OVER007

500

m137166

500

ST303

701

m136450

199

m136838

2

m136986

500

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat ☐	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	☐ OTHER : _____					
Misidentified ☐	☐ Past Due						

Picklist Print

Page 16

Wednesday, April 05, 2017 2:11:25 PM

Work Order ID: 157752

157752

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 4/6/2017

Required Date: 4/13/2017

Start Qty: 1.00

Required Qty: 1.00

MS21047-3

Purchased

No

100

Each

216.0000

18

18

MS21047-3

Nut Plate

DAS
28
9-89

Location

Loc Qty

Loc Code

ST301

216

m136442

3

m136781

13

m136986

100

m137075

100

**

DAS
6 APR 11 2017
9-89

DAS
27
9-89

MS24693-C278

Purchased

No

100

Each

60.0000

5

5

MS24693-C278

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

ST287

60

m136554

60

**

DAS
6 APR 11 2017
9-89

DAS
27
9-89

MS24694-S51

Purchased

No

100

Each

322.0000

5

5

MS24694-S51

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

ST284

322

m135442

72

m136866

250

**

DAS
6 APR 11 2017
9-89

DAS
27
9-89

MS24694-S54

Purchased

No

100

Each

192.0000

2

2

MS24694-S54

SCREW

DAS
28
9-89

Location

Loc Qty

Loc Code

ST284

192

153846

157

m135948

35

**

DAS
6 APR 11 2017
9-89

DAS
27
9-89

Wednesday, April 05, 2017 2:11:25 PM

Shop Packet Print

Page 16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, April 05, 2017 2:11:25 PM

Work Order ID: 157752

157752

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 4/6/2017

Required Date: 4/13/2017

Start Qty: 1.00

Required Qty: 1.00

MS24694-S55

Purchased

No

100

Each

314.0000

3

3

MS24694-S55

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

over006

247

153847

247

ST283

67

m136042

67

**

DAS
6
9-89

APR 11 2017

DAS
27
9-89

MS27039-08-13

Purchased

No

100

Each

348.0000

2

2

MS27039-08-13

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

over006

325

153849

325

ST278

23

m136199

23

**

DAS
6
9-89

APR 11 2017

DAS
27
9-89

MS27039-1-10

Purchased

No

100

Each

309.0000

2

2

MS27039-1-10

SCREW

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

15

m129541

15

ST280

294

m137164

294

**

DAS
6
9-89

APR 11 2017

DAS
27
9-89

MS27039-1-12

Purchased

No

100

Each

64.0000

6

6

MS27039-1-12

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

ST280

64

m136537

64

**

DAS
6
9-89

APR 11 2017

DAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
				Completed By					
				Lead hand / Supervisor Approval Verification					
				QC / QA Coordinator Approval					

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					

Picklist Print

Wednesday, April 05, 2017 2:11:25 PM

Work Order ID: 157752

157752

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 4/6/2017

Required Date: 4/13/2017

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-16

Purchased

No

100

Each

171.0000

24

24

MS27039-1-16

Screw

**

APR 11 2017

DAS
6
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

over006

50

m137061

50

ST280

121

m136851

100

m136975

21

MS27039-1-19

Purchased

No

100

Each

281.0000

22

22

MS27039-1-19

Screw

**

APR 11 2017

DAS
6
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

80

m134134

80

ST280

201

m136648

1

m137075

200

MS27039-1-20

Purchased

No

100

Each

89.0000

2

2

MS27039-1-20

Screw

**

APR 11 2017

DAS
6
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST280

89

m136554

89

MS27039-1-21

Purchased

No

100

Each

167.0000

4

4

MS27039-1-21

Screw

**

APR 11 2017

DAS
6
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST280

167

m127904

167

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

Wednesday, April 05, 2017 2:11:25 PM

Work Order ID: 157752

157752

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 4/6/2017

Required Date: 4/13/2017

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0332P

Purchased

No

100

Each

2,528.000

144

144

DAS
6
9-89

NAS1149F0332P

Washer

APR 11 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

335

m133709

335

ST262

2193

m136835

393

m137075

1800

144

APR 11 2017

NAS1149F0363P

Purchased

No

100

Each

82.0000

2

2

DAS
6
9-89

NAS1149F0363P

WASHER

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST262

82

124555

82

2

NAS1149F0432P

Purchased

No

100

Each

601.0000

4

4

DAS
6
9-89

NAS1149F0432P

WASHER

APR 11 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

ST262

601

M136442

601

4

NAS1149FN832P

Purchased

No

100

Each

1,526.000

4

4

DAS
6
9-89

NAS1149FN832P

Washer

APR 11 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

323

M135058

232

M136182

91

ST263

1203

M136866

1203

4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																																																								
Description Work Order Deviation				Disposition				Completed By																																																							
								Lead hand / Supervisor Approval Verification																																																							
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Root Cause		FAULT CATEGORY																																																													
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____	
Misidentified ☐	Past Due ☐																																																														



APICAL INDUSTRIES, INC.
dba DART AEROSPACE

ENGINEERING CHANGE NOTICE NO.		05304		SHEET 1 OF 1						
DWG NO.	646.4000	REV:	C	PREPARED BY	J. BECKER	DATE:	02/04/16	EFFECT ON DWG ☐ INC. ☒ UNINC.		
DWG TITLE: AS350 CABLE CUTTERS KIT										
APPROVED BY:		ENGR			MFG			QC		EFF. NEXT ORDER
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE		REASON: REVISED F/N 12.								ECR: N/A

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 157752 MLS
17-04-05

SHEET 1, BOM IS:

12	R	601.1624	8	16	LOCKNUT	MS21042L3	
F/N	TC	PART NUMBER	4006	4005	DESCRIPTION	MATERIAL	SPECIFICATION
		QTY					
DOCUMENTS EFFECTED:					CHANGE CATEGORY	DER REVIEW REQUIRED	
☐ PATTERN ☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☒ BOM					☐ MAJOR ☒ MINOR	☐ YES ☒ NO	

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NOTES:

1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.

2 INSTALL F/N 14 WITH F/N 52 & 53.

3 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMASTER-CARR P/N 75935A651.

4 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE.
VENDOR: R.S. HUGHES P/N 021200-24216.

5 REUSE FASTENERS FROM F/N 1.

6 USE WASHERS A/R AS SHIMS TO OBTAIN BEST FITMENT

7 AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ON TO F/N 1.

8 INSTALL SHIM IF OEM PROVISIONS ARE INSTALLED ON AIRCRAFT. REMOVE SHIM LAYERS TO ACHIEVE CORRECT SIZE. MATCH DRILL HOLES. USE F/N 78 SCREW IN PLACE OF F/N 17 SCREW.

9 NEWER INSTALLATIONS ON AIRCRAFT WITH UPDATED CANOPY MAY REQUIRE DIFFERENT LENGTH SCREWS. USE F/N 62 TO REPLACE F/N 44 & F/N 26 IN PLACE OF F/N 41 WHEN NECESSARY.

UNINCORPORATED ECN(S)

05304

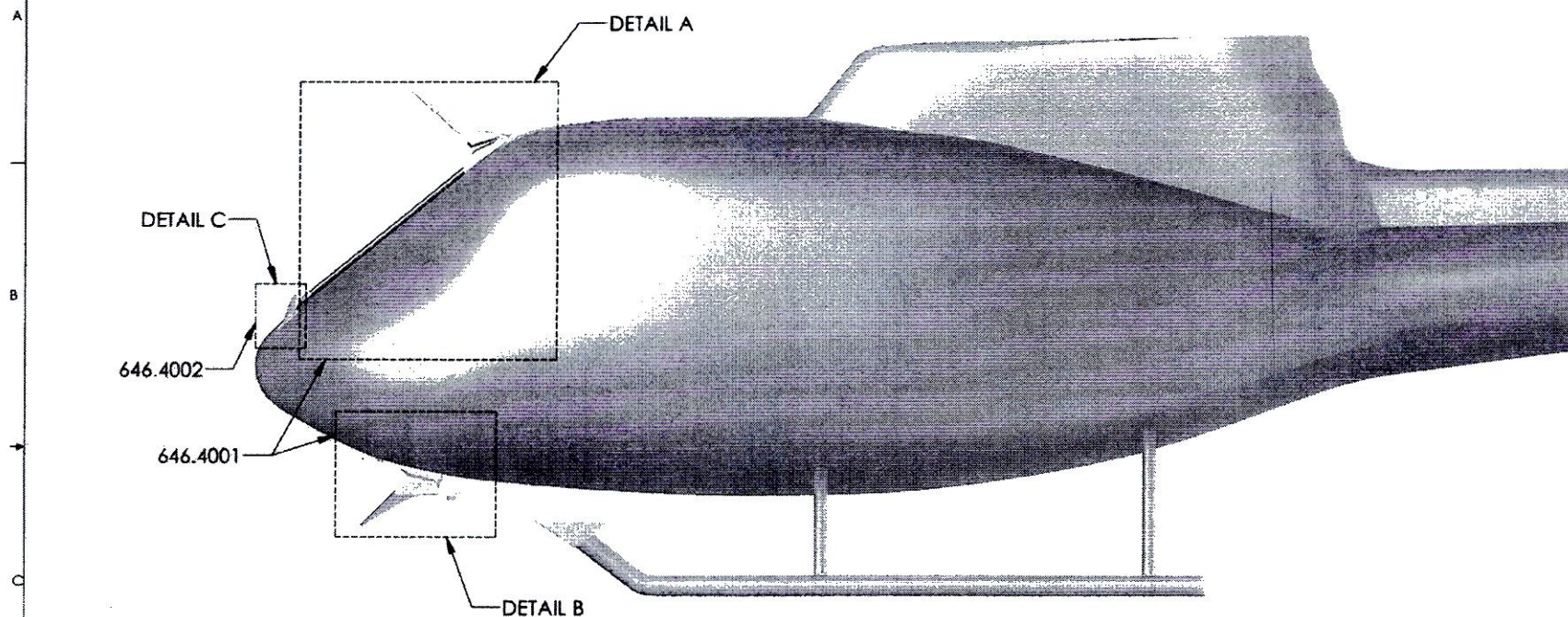
5	5	5	78	601.3875	SCREW					
1	1	1	77	646.9410	SHIM					
	4	4	76	601.2764	WASHER	NAS1449PMS3P				
	2	2	75	601.2973	LOCKNUT	MS27042-08				
	2	2	74	601.2988	SCREW	MS27039-0813				
	2	2	73	601.2943	LOCKNUT	MS27042-3				
	2	2	72	601.3128	NUT	AN316C4R				
	2	2	71	601.3209	LOCKNUT	MS27042-4				
	4	4	70	601.2638	WASHER	NAS1449PMS3P				
	2	2	69	601.2669	BOLT	AN4C7A				
	2	2	68	601.3119	CLEVIS	AN465-34R				
	2	2	67	601.3121	EYE BOLT	AN46-5A				
	2	2	66	650.9201	EYE BRACKET ASSY					
	REF	REF	65	647.5701	GPS MOUNT KIT					
		2	64	601.3151	WASHER	NAS1449PMS3P				
		2	63	601.2911	SCREW	MS246PMS53				
	24	24	62	601.2637	SCREW	MS27039-1-16				
2	2	2	61	601.2763	BOLT	AN3-12A				
	1	1	60	646.3913	SHIM					
	4	4	59	646.3912	SHIM					
	1	1	58	646.3911	SHIM					
	4	4	57	646.3910	SHIM					
	5	5	56	600.1013	PRIMER					
	8 FT	8 FT	55	600.0129	VHB TAPE					
	1	1	54	600.1012	SEALANT	PE-TAPE CLASS B				
	1	1	53	600.0991	MAGNABOND 6398 PART B					
	1	1	52	600.0990	MAGNABOND 6398 PART A					
6	10	10	51	601.2826	BOLT	AN3-11A				
		2	50	646.3814	WIPER BRACKET					
		2	49	601.2910	SCREW	MS27039-1-16				
	2		48	601.1365	SCREW	MS27039-1-10				
	2		47	646.3719	DOUBLER					
		2	46	646.3718	CUSTOM WASHER					
	1		45	646.3717	DOUBLER					
	22	2	44	601.1948	SCREW	MS27039-1-19				
	2	2	43	601.1952	SCREW	MS27039-1-20				
	4	4	42	601.1956	SCREW	MS27039-1-21				
4006	4003	4004	4003	4002	4001	FIND #	PART #	DESCRIPTION	MATL	SPEC.

REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECN 2719, 0281, 02719 & 02745	02/08/2010	P. BRAVO
B	INCORPORATED ECN 0204L, 0207 & 04731	11/04/2014	P. BRAVO
C	INCORPORATED ECN 0205	09/09/2015	P. BRAVO

		2	2	41	601.2829	SCREW	MS2246P-554			
		2	2	40	601.2831	RIVET	MS20470ADS-7			
		1	1	39	646.3716	GAUGE BRACKET				
		6	6	38	601.1953	SCREW	MS2700P-1-12			
	2	2	2	37	646.3715	STRUT DOUBLER				
				36	601.2824	BOLT	AN3-5A			
12	36		36	35	601.2277	RIVET	CR3215-5-3			
6	18		18	34	600.0795	NUPLATE	MS27047-3			
3	3		3	33	601.2565	RIVET	MS20470ADS-7			
1	1		1	32	646.3813	STRUT BRACKET				
4	4		4	31	601.2822	BOLT	AN3-3A			
2	2		2	30	646.3812	GUSSET BRACKET				
8	8		8	29	601.2564	RIVET	MS20470ADS-6			
1	1		1	28	646.3714	GUSSET				
	1	1	1	27	646.3610	FILLER				
	3	3	3	26	601.2830	SCREW	MS2246P-555			
	2	2	2	25	601.2825	BOLT	AN3-6A			
	1	1	1	24	646.3811	RADIUS BLOCK				
	1	1	1	23	646.3712	CLIP				
	1	1	1	22	646.3711	CLIP				
8	8		8	21	601.2832	RIVET	MS20470ADS-5.5			
14	14		14	20	601.2020	RIVET	CR3215-5-3			
4	6	4	6	10	601.2823	BOLT	AN3-4A			
	1	1	1	18	601.2827	BOLT	AN3-15A			
	5	5	5	17	601.2912	SCREW	MS2246P-551			
1	1		1	16	646.3713	GUSSET				
1	1		1	15	646.3710	SUPPORT				
	1		1	14	646.3710	DOUBLER				
	1	1	1	13	646.3110	CHANNEL				
14	10	8	53	6	61	12	601.1624	LOCKNUT	MS21042L3	
16	32	18	120	16	144	11	601.1607	WASHER	MS2110P032P	
						10	646.3410	LH WIPER DEFLECTOR		
						9	646.3411	RH WIPER DEFLECTOR		
		2	2	8	647.7703	STRUT ASSY				
		2	2	7	647.0112	STRUT BRACKET				
	1	1	1	6	646.3511	STRUT				
	1	1	1	5	646.3510	STRUT				
2	2		2	4	646.3810	BRACKET				
		1	1	3	646.2910	DEFLECTOR				
	1	1	1	2	646.3001	LOWER CUTTER ASSY				
		1	1	1	646.3301	UPPER CUTTER ASSY				
X					646.4006	LOWER CUTTER FORK				
	X				646.4005	LOWER CUTTER REMOVABLE				
		X			646.4004	FIXED PROVISIONS KIT				
			X		646.4003	CABLE CUTTERS KIT WITHOUT FEED				
				X	646.4002	AS350 WIPER DEFLECTOR KIT				
				X	646.4001	AS350 CABLE CUTTERS KIT				
4006	4003	4004	4003	4002	4001	FIND #	PART #	DESCRIPTION	MATL	SPEC.

QTY		PARTS LIST	
NEXT ASSY (S)		ORIGINAL DATE: 08-27-08 DRAWN BY: L. HUPP CHECKED BY: P. BRAVO DRAWING APPROVAL: P. BRAVO DATE: 08-27-08 CONTRACTING:	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES 10 DECIMALS ARE 0.0001 3 PLACE DECIMALS ARE 0.001 ANGLES: 1/2°		3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760) 724-5300 AS350 CABLE CUTTERS KIT DWT: 07M26 SCALE: NONE SHEET: 1 OF 5	

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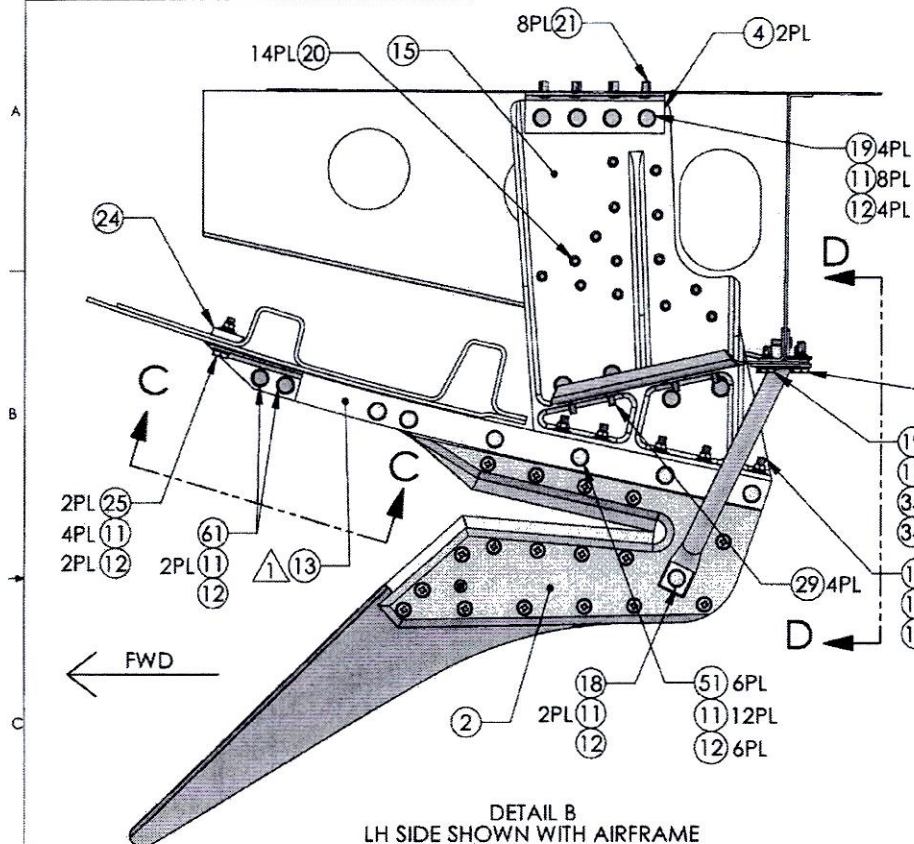


ORIGINAL DATE 08-27-08		3030 ENTERPRISE CT., SUITE A, VISTA, CA. 92081	
DRAWN BY S. HUI		DIRECTOR J. BRAND	
DRAWING APPROVAL P. WAVER		APICAL INDUSTRIES INC. DBA DART AEROSPACE	
CHECKED S. HUI			
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±0.10 3 PLACE DECIMALS ±0.05 ANGLES ± 1°			
REV B	CAGE CODE 07M26	DWG. NO. 646.4000	REV C
SCALE: NONE		SHEET: 2 OF 5	

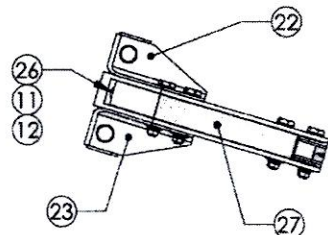
DART
 AEROSPACE
 3030 ENTERPRISE CT.,
 SUITE A,
 VISTA, CA. 92081
 (760) 724-5300

AS350 CABLE CUTTERS KIT

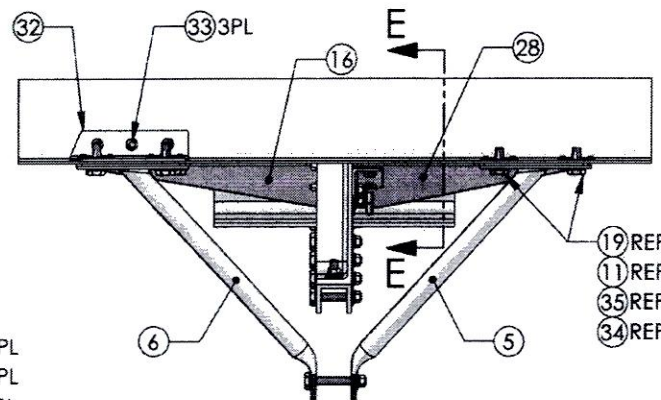
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DIA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE EXPLICIT
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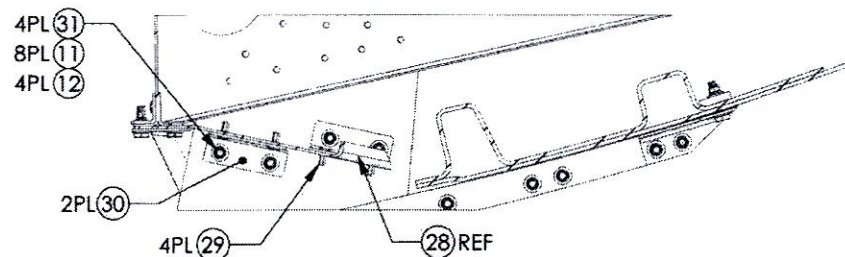
DETAIL B
LH SIDE SHOWN WITH AIRFRAME



SECTION C-C



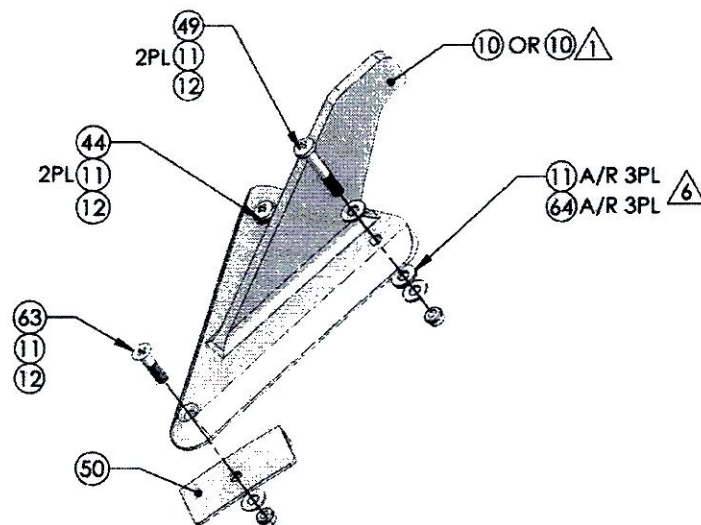
SECTION D-D
CUTTER HIDDEN FOR CLARITY



SECTION E-E

ORIGINAL DATE 03-21-08		3030 ENTERPRISE CT. SUITE A VISTA, CA 92081 (760) 724-5300		
DRAWN BY L. KUPP				
CHECKED BY P. BRAYD				
DRAWING APPROVAL P. BRAYD				
DESIGN P. BRAYD	APICAL INDUSTRIES INC. DIA DART AEROSPACE			
CONTRACT NO.				
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE: 1 PLACE DECIMALS ±0.10 2 PLACE DECIMALS ±0.05 3 PLACE DECIMALS ±0.02 ANGLE: 1/2°				
REV	CAGE CODE	DWG. NO.	REV	AS350 CABLE CUTTERS KIT
B	07M36	646.4000	C	
SCALE: NONE				
SHEET 4 OF 5				

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DETAIL C
LH SHOWN EXPLODED
RH OPPOSITE

ORIGINAL DATE 08-27-08		3030 ENTERPRISE CT. SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY S. HUFF		CHECKED P. BRAVO	
DRAWING APPROVAL P. BRAVO		APICAL INDUSTRIES, INC. DART AEROSPACE	
CONTRACT NO.		AS350 CABLE CUTTERS KIT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS .0010 3 PLACE DECIMALS .0005 ANGLES .5°		SIZE B	QTY 07M26
DWG. NO. 646.4000		REV. C	
SCALE NONE		SHEET 5 OF 5	

REFERENCE ONLY

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WRITTEN PERMISSION OF APICAL INDUSTRIES OBA DART AEROSPACE IS PROHIBITED.

NOTES:

-  AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.

- 2 INSTALL F/N 14 WITH F/N 52 & 53.

- 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMASTER-CARR P/N 75935A651.

- 4 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE.
VENDOR: R.S. HUGHES P/N 021200-24216.

- REUSE FASTENERS FROM F/N 1.

-  USE WASHERS A/R AS SHIMS TO OBTAIN BEST FITMENT.

-  AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ON TO F/N 1.

- 8 INSTALL SHIM IF OEM PROVISIONS ARE INSTALLED ON AIRCRAFT. REMOVE SHIM LAYERS TO ACHIEVE CORRECT SIZE. MATCH DRILL HOLES. USE F/N 78 SCREW IN PLACE OF F/N 17 SCREW.

- 9** NEWER INSTALLATIONS ON AIRCRAFT WITH UPDATED CANOPY MAY REQUIRE DIFFERENT LENGTH SCREWS. USE F/N 62 TO REPLACE F/N 44 & F/N 26 IN PLACE OF F/N 41 WHEN NECESSARY.

UNINCORPORATED ECN(s)

0.5304

5		5		5	78	601.3875	SCREW	MS27039-1	MS27039-1	
1		1		1	77	646.9410	SHIM			
		4		4	76	601.2764	WASHER	MS27039-1	MS27039-1	
		2		2	75	601.2973	LOCKNUT	MS27039-1	MS27039-1	
		2		2	74	601.2968	SCREW	MS27039-1	MS27039-1	
		2		2	73	601.2943	LOCKNUT	MS27039-1	MS27039-1	
		2		2	72	601.3126	NUT	MS27039-1	MS27039-1	
		2		2	71	601.3209	LOCKNUT	MS27039-1	MS27039-1	
		4		4	70	601.2638	WASHER	MS27039-1	MS27039-1	
		2		2	69	601.2669	BOLT	MS27039-1	MS27039-1	
		2		2	68	601.3119	CLEVIS	MS27039-1	MS27039-1	
		2		2	67	601.3121	EYE BOLT	MS27039-1	MS27039-1	
		2		2	66	650.9201	EYE BRACKET ASSY	MS27039-1	MS27039-1	
	REF	REF		REF	65	647.5701	GPS MOUNT KIT	MS27039-1	MS27039-1	
				2	64	601.3151	WASHER	MS27039-1	MS27039-1	
			2		63	601.2911	SCREW	MS27039-1	MS27039-1	
		24		24	62	601.2637	SCREW	MS27039-1	MS27039-1	
2		2		2	61	601.2763	BOLT	MS27039-1	MS27039-1	
		1		1	60	646.3913	SHIM	MS27039-1	MS27039-1	
		4		4	59	646.3912	SHIM	MS27039-1	MS27039-1	
		1		1	58	646.3911	SHIM	MS27039-1	MS27039-1	
		4		4	57	646.3910	SHIM	MS27039-1	MS27039-1	
		5		5	56	600.1013	PRIMER	MS27039-1	MS27039-1	
	8 FT			8 FT	55	600.0129	VHB TAPE	MS27039-1	MS27039-1	
		1	1	1	54	600.1012	SEALANT	MS27039-1	MS27039-1	
		1		1	53	600.0991	MAGNEBOND 438 PART B	MS27039-1	MS27039-1	
		1		1	52	600.0990	MAGNEBOND 438 PART A	MS27039-1	MS27039-1	
6		10		10	51	601.2826	BOLT	MS27039-1	MS27039-1	
			2		50	646.3814	WIPER BRACKET	MS27039-1	MS27039-1	
			2		49	601.2910	SCREW	MS27039-1	MS27039-1	
	2			2	48	601.1365	SCREW	MS27039-1	MS27039-1	
	2			2	47	646.3719	DOUBLER	MS27039-1	MS27039-1	
		2		2	46	646.3718	CUSTOM WASHER	MS27039-1	MS27039-1	
	1			1	45	646.3717	DOUBLER	MS27039-1	MS27039-1	
		22	2	22	44	601.1948	SCREW	MS27039-1	MS27039-1	
		2		2	43	601.1952	SCREW	MS27039-1	MS27039-1	
		4		4	42	601.1956	SCREW	MS27039-1	MS27039-1	
4006	4005	4034	4003	4002	4001	FIND #	PART #	DESCRIPTION	MTRL	SPEC.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECH 0279F, 0281F, 0271F & 0274S	02/08/2010	P. BRAVO
B	INCORPORATED ECH 0304A, 0307P & 04731	11/04/2011	P. BRAVO
C	INCORPORATED ECH 0309B	01/05/2015	P. BRAVO

						2	2	41	601.2829	SCREW	MS2469454
						1	2	40	601.2831	RIVET	MS20426ADS-7
							1	39	646.3716	GAUGE BRACKET	
						6	6	38	601.1953	SCREW	MS27039-1-12
			2				2	37	646.3715	STRUT DOUBLER	
	2			2			2	36	601.2824	BOLT	AN3-5A
12		36					36	35	601.2277	RIVET	CCB646-3-02
		18					18	34	600.0795	NUT/PLATE	MS20407-3
3		3					3	33	601.2565	RIVET	MS20476ADS-7
1		1					1	32	646.3813	STRUT BRACKET	
4		4					4	31	601.2822	BOLT	AN3-5A
2		2					2	30	646.3812	GUSSET BRACKET	
8		8					8	29	601.2564	RIVET	MS20476ADS-6
1		1					1	28	646.3714	GUSSET	
		1		1			1	27	646.3610	FILLER	
		3		3			3	26	601.2830	SCREW	MS2469455
		2		2			2	25	601.2825	BOLT	AN3-4A
		1		1			1	24	646.3811	RADIUS BLOCK	
		1		1			1	23	646.3712	CLIP	
		1		1			1	22	646.3711	CLIP	
8		8					8	21	601.2832	RIVET	MSB194DS-6.5
14		14					14	20	601.2020	RIVET	CR3213-6-3
4		6		6			10	19	601.2823	BOLT	AN3-4A
		1		1			1	18	601.2827	BOLT	AN3-12A
		5		5			5	17	601.2912	SCREW	MS24694551
1		1					1	16	646.3713	GUSSET	
1		1					1	15	646.3210	SUPPORT	
		1					1	14	646.3710	DOUBLER	
		1		1			1	13	646.3110	CHANNEL	
14	10	8	53	6		61	12	601.1624	LOCKNUT	MS21042-3	
16	32	18	120	16	144	11	601.1607	WASHER	NAS1149C03P		
					1		10	646.3410	LH WIPER DEFLECTOR		
					1		9	646.3411	RH WIPER DEFLECTOR		
					2		8	647.7703	STRUT ASSY		
					2		7	647.0112	STRUT BRACKET		
		1		1		1	6	646.3511	STRUT		
		1		1		1	5	646.3510	STRUT		
2		2				2	4	646.3810	BRACKET		
				1		1	3	646.2910	DEFLECTOR		
		1		1		1	2	646.3001	LOWER CUTTER ASSY		
				1		1	1	646.3301	UPPER CUTTER ASSY		
X								646.4006	LOWER CUTTER FEED PROVISION		
	X							646.4005	LOWER CUTTER REMOVABLE PROVISION		
		X						646.4004	FEED PROVISIONS KIT		
			X					646.4003	CABLE CUTTERS 48 W/NOSE FEED PROVISION		
				X				646.4002	ASS380 WIPER DEFLECTOR KIT		
					X			646.4001	ASS380 CABLE CUTTERS KIT		
.A006	.A005	.A004	.A003	.A002	.A001	FIND #	PART #	DESCRIPTION	MA11	SPEC.	

QTY		PARTS LIST			
NEXT ASSY (S)		ORIGINAL DATE 1/26/78 (DRAWN BY) J. HUFF P. BRAYCO		DART 3030 ENTERPRISE CT., SUITE A AEROSPACE YSTA, CA. 92081 AERIAL INDUSTRIES, INC. (800) 241-1100 (760) 724-6300	
DIMENSIONS APPROVAL P. BRAYCO DATE: 1/26/78 (CHECKED BY)		AS350 CABLE CUTTERS KIT			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1. FINISH DIMENSIONS 0.010 2. HOLE DIMENSIONS 0.015 3. ANGLES 0.3°		121 B	KIT CMT CODE 079M26	DWG NO. 646.4000	REV C
		SCALE NONE 1 SHEET 1 OF 5			

Work Order ID 157752

157752

Page 1

Wednesday, April 05, 2017 2:11:25 PM

Item ID: 646.4001 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: AS350 Cable Cutter System
Start Date: 4/6/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 4/13/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference: SCHEDULED/S

Approvals: Process Plan: Date: APR 05 2017 Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
646.4000	C1	<u>APR 10 2017</u> <u>APR 10 2017</u>							
100	Document Control	0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Doc.Control - USB or Paperwork	Photocopy bluefile & type labels per PPP 646.4001								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.03							
Quality Control									

CB **DAS**
21
9-89 APR 11 2017